## USE OF LIQUID FUEL.

## LETTER

FROM

## THE SECRETARY OF THE TREASURY,

TRANSMITTING

A COPY OF A COMMUNICATION FROM THE SECRETARY OF THE NAVY SUBMITTING AN ESTIMATE OF APPROPRIATION FOR INVESTIGATING USE OF LIQUID FUEL.

FEBRUARY 6, 1902.—Referred to the Committee on Naval Affairs and ordered to be printed.

TREASURY DEPARTMENT,

OFFICE OF THE SECRETARY,

Washington, February 5, 1902.

SIR: I have the honor to transmit herewith, for the consideration of Congress, copy of a communication from the Secretary of the Navy, of the 4th instant, submitting an estimate of appropriation, to be included in the naval appropriation bill for the fiscal year ending June 30, 1903, for the purpose of investigating the best means of burning liquid fuel for naval purposes, \$20,000.

Respectfully,

L. M. SHAW, Secretary.

The Speaker of the House of Representatives.

NAVY DEPARTMENT, Washington, February 4, 1902.

SIR: I have the honor to forward herewith, for transmission to Congress, to be included in the naval appropriation bill, a supplementary estimate of an appropriation amounting to \$20,000, submitted by the Engineer in Chief, United States Navy, for the purpose of investigating the best means of burning liquid fuel for naval purposes. I also inclose a copy of a letter from the Engineer in Chief, United States Navy, in explanation of this estimate.

I have the honor to be, sir, very respectfully,

JNO. D. LONG, Secretary.

The SECRETARY OF THE TREASURY.

DEPARTMENT OF THE NAVY,
BUREAU OF STEAM ENGINEERING,
Washington, D. C., January 31, 1902.

Sir: The Bureau urgently requests the Department to transmit to the naval committees of the Congress a supplementary estimate of \$20,000, to be expended under the cognizance of the Bureau of Steam Engineering for the investigation of the best means of burning liquid fuel for naval purposes.

In view of the fact that there now appears to be an unlimited quantity of crude petroleum both in the California and Texas oil fields, which can be delivered at tidewater at a comparatively slight cost, the Bureau believes that there is necessity to commence extended experiments for determining how this combustible can be adapted for navaluses.

I particularly desire to call the attention of the Department to the fact that in my annual report I stated that the problem of utilizing liquid fuel for naval and maritime purposes was one that it was the duty of the Navy, at least, in part, to help solve.

The Bureau deems it unnecessary to tell of the many resulting advantages that would accrue from the successful burning of liquid fuel on board a warship. If the Department, however, deems that the detailed advantages should be stated, there can be prepared in a short time a special report upon the subject.

The Bureau has been urged to make this request by many interested in naval affairs, since it is believed that the present is an opportune time to again take up the subject. I would also state that if the Bureau deems it compatible with the best interests of the service to accept large quantities of this fuel for experimental purposes, an unlimited amount can probably be secured free of cost.

Very respectfully,

Engineer in Chief, U. S. N., Chief of Bureau.

The SECRETARY OF THE NAVY.

Estimates of appropriations required for the service of the fiscal year ending June 30, 1903, and following years.

## NAVAL ESTABLISHMENT.

BUREAU OF STEAM ENGINEERING.

Note.—The Bureau desires to carry on an extended series of tests to find out the value of this combustible for naval purposes.

It may be remarked that the chemical composition of the Texas yield is different from that of the Pennsylvania and Ohio districts, and therefore it may be possible to burn the Texas product, although comparatively little commercial success has been secured in burning the northern fuel.

In general one pound of liquid fuel should evaporate 50 per cent more water than a pound of excellent coal, and the small sum required for these tests is certain to bring a good return in giving the Navy Department information as to whether or not it will be possibile to utilize this combustible for war-ship purposes.